perspective, more research is needed to identify the reasons for augmentation in children and adolescents with ADHD (e.g., duration of effect, titration) and to examine patterns of medication taking throughout the day.

PMH86

CONTINUITY OF CARE FOLLOWING HOSPITALIZATION FOR BIPOLAR DISORDER IN PRIVATE PAYER CLAIMS

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OBJECTIVES: Poor continuity of care occurs when patients do not follow-up after being discharged from the hospital. In bipolar disorder problems with continuity of care and medication adherence may lead to expensive relapses. The objectives of this research were threefold: 1) examine the frequency of poor continuity of care for individuals with bipolar disorder; 2) identify the predictors of poor continuity of care; and 3) evaluate the potential increased psychiatric hospitalization costs. **METHODS:** Premier linked their PerspectiveTM Comparative Database (PCD), the largest, most detailed, U.S. hospital database, with the administrative claims from a large managed care organization. We identified 319 individuals who had a primary discharge diagnosis of bipolar disorder in the PCD and who maintained continuous eligibility for the 60 days prior and the 180 days following the hospitalization. Good continuity of care was operationally defined as the presence of a psychiatric visit in the 60 days following discharge. Propensity scores were used to correct for background differences between patients with good continuity of care and patients with poor continuity of care. **RESULTS:** A total of 34.5% of individuals had poor continuity of care. Prior to discharge, individuals who would later have poor continuity of care could be identified. Some variables that independently predicted later poor continuity of care included no psychotherapy visits, no psychiatric visits, substance use diagnoses, and psychiatric hospitalizations. After correcting for background differences, patients with poor continuity of care had reduced mood stabilizer use (94 vs. 116 days, $p = 0.008$) and twice the psychiatric hospitalization charges ($10,027 vs. $4,892, $p = 0.03$). **CONCLUSIONS:** One in three individuals with bipolar disorder did not have a psychiatric follow-up visit after discharge from the hospital. This poor continuity of care appears to lead to decreased medication adherence and increased psychiatric hospitalizations. An effective, targeted intervention could potentially prevent relapses and reduce health care costs.

PMH87

TREATMENT PATTERNS BY RACE/ETHNICITY AND INCOME LEVELS AMONG ATTENTION-DEFICIT HYPERACTIVITY DISORDER (ADHD) SUBJECTS TREATED WITH SHORT-, INTERMEDIATE-AND LONG-ACTING STIMULANTS

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OBJECTIVES: This research examines the relationship of ethnicity and income with attention-deficit hyperactivity disorder (ADHD) treatment patterns among subjects on medications of different durations. **METHODS:** Claims of newly treated ADHD subjects, aged ≥6 years, initially treated with stimulants, and continuously enrolled in a US commercial health plan 6 months prior and 12 months after their first prescription (January 1, 2004 "C September 30, 2006) were studied. Subjects took short- (SAS) intermediate- (IAS) or long-acting (LAS) stimulant medication for ADHD. Persistence was defined as the number of days on initial therapy. Adherence was defined as the number of days of initial therapy divided by persistent days. Differences in mean persistence and adherence, dosing, switching and augmentation among ethnicities (non-Hispanic Caucasians [NHC], Hispanics [H] and African Americans [AA]) and among income levels were assessed. **RESULTS:** Among children on LAS (n = 12,796), NHC had the highest mean adherence (0.56) and the longest mean persistence (251 days) ($p < 0.0001$ among groups), while AA had the shortest persistence (222 days) and the lowest adherence (0.46) ($p < 0.0001$ among groups). Similarly, among adults receiving LAS (n = 8422), NHC had the highest adherence (0.58) and the longest persistence (225 days). Persistence was again shortest among AA (194 days; $p = 0.037$ among groups), while adherence was equally low for AA and H (0.52; $p = 0.002$ among groups). Within treatment groups of different durations, the propensity of subjects to change dose, switch or augment their medication varied according to ethnicity. While no significant relationship between race/ethnicity and either adherence or persistence was found among children or adults receiving SAS or IAS, the IAS and LAS groups showed greater persistence and adherence with increased income levels in some subjects. **CONCLUSIONS:** Persistence and adherence to stimulant medications differed by race/ethnicity and income. This may have implications for the optimal management of ADHD.

PMH88

A SYSTEMATIC EVALUATION OF PUBLISHED LITERATURE TO ASSESS BURDEN OF TREATMENT-RESISTANT DEPRESSION

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BACKGROUND: Treatment-resistant depression (TRD) is severely disabling with no treatments proven to provide sustainable benefit when multiple medications, psychotherapy, and electroconvulsive therapy fail. (Malone, 2008). **OBJECTIVES:** The perform a systematic review of published literature to evaluate recent health economics and outcomes research related to TRD to inform future research initiatives. **METHODS:** English language citations in PubMed and Cochrane Library from January 1, 2000–October 1, 2008 were systematically reviewed. Standard search terms defined disease states (including TRD, severe depression (SD), chronic depression (CD), major depressive disorders (MDD), and suicidality); interventions (deep brain stimulation, electroconvulsive therapy, transcranial magnetic stimulation and vagus nerve stimulation); and outcomes (treatment outcomes, presenteeism, symptom burden, resource utilization, productivity, cost, economics, and quality of life(QOL)). **RESULTS:** Initial searches yielded 8811 citations, narrowed to 5626 using date and language criteria. Title review further narrowed literature (reasons: not related to depression ~70%, clinical trials of antidepressant medications ~20%, and review/case studies ~10%), resulting in 411 unique abstracts for review and forty publications for abstraction. Clinical studies were most frequent (n = 16) and economic models least frequent (n = 3); a majority (n = 22) reported a U.S. patient population. Thirteen publications reported on TRD, thirteen on MDD, and six reported on a "general depression" population. Reported definitions of TRD varied greatly (one medication failure (n = 2), two medication failures (n = 6), HAM-D score (n = 3), diagnosis/treatment algorithm (n = 1), not defined (n = 1)). HAM-D (n = 12) and MADRS (n = 9) were the most frequently reported clinical outcomes measures. Cost outcomes were discussed in thirteen reports (direct costs (n = 11), indirect costs (n = 2)). **CONCLUSIONS:** Definitions of TRD or CD reported in the literature vary substantially, and studies examining productivity of patients were confined to generic depression or MDD populations and would not be directly comparable to a CD or TRD population. Additional research is necessary to better define the cost and patient burden of TRD.

NEUROLOGICAL DISORDERS – Clinical Outcomes Studies

PND1

PREVALENCE OF INSOMNIA IN EUROPE: A COMPARISON OF FIVE COUNTRIES

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OBJECTIVES: To assess the prevalence of insomnia among five large European nations. **METHODS:** TNS Healthcare's European Healthcare Panel of individuals in France, Germany, Italy, UK and the Netherlands were surveyed in 2007 to assess disease burden at national level. The self-reported epidemiological data is representative of population gender and age (18–24,25–34,35–44,45–54,55–64,65–69yrs) strata in respective countries, ensured by sampling and intensive panel management. The survey collected information on select health conditions (incl. insomnia/sleeping-problems; in the past 12-months), quality of life and health care-utilization. **RESULTS:** Total of over 160,000 adult individuals in the European Healthcare Panel completed survey in the five European nations. Prevalence of Insomnia varied widely between these 5 nations, as follows (All, Male, Female, % individuals): Netherlands: 13.5%,9.2%,18.0%; Italy: 18.5%,13.3%,23.6%; U.K: 19.3%,14.7%,24.0%; Germany: 21.6%,16.2%,27.0%; France: 27.6%,19.9%,35.0%. Within each country, burden of Insomnia varied by age and gender; distribution among male (18–24, 25–34,35–44,45–54,55–64,65+ yrs: % pts) was: the Netherlands: 6.4%,8.5%,8.1%, 10.9%,11.0%,8.9%; Italy: 11.1%,8.9%,12.6%,15.7%,16.1%,18.9%; U.K: 9.8%, 10.8%,16.6%,18.1%,17.0%,12.9%; Germany: 12.8%,14.1%,17.1%,19.6%,18.0%, 11.6%; France: 15.9%,17.8%,21.2%,24.0%,19.5%,18.9%; distribution among female (18–24,25–34,35–44,45–54,55–64,65+ yrs: % pts) was: the Netherlands: 8.5%,12.5%,15.5%,23.7%,23.4%,25.6%; Italy: 16.9%,19.1%,22.4%,28.0%, 27.2%,27.2%; U.K: 17.1%,18.2%,23.0%,30.1%,30.0%,24.8%; Germany: 23.3%, 23.5%,26.5%,32.0%,27.6%,26.2%; France: 28.5%,29.6%,34.2%,39.9%,40.3%, 37.2%. General Practitioners were the primary point of diagnosis and source of treatment, even though this statistic varied between the countries. **CONCLUSIONS:** Prevalence of insomnia appears to be substantial in the studied European nations, with France bearing the most burden (one-in-five and one-in-three males and females respectively in France suffered from this condition). Prevalence peaked among the 45–64 age-group across the countries. Females had substantially higher disease burden across the countries, amounting to as much as 1.5 to 2 times more than their male counterparts in certain age groups.

PND2

CHRONIC MIGRAINE CRITERIA AND THEIR EFFECTS ON GLOBAL PREVALENCE ESTIMATES: A SYSTEMATIC REVIEW

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OBJECTIVES: The definition of chronic migraine (CM), as opposed to episodic migraine, has evolved over 20 years of clinical study. This systematic review summarized population-based studies reporting CM prevalence and examined how variations in definitions affected estimates. **METHODS:** We conducted a systematic search of PubMed, Cochrane, and EMBASE. Search terms included chronic migraine, transformed migraine, chronic headache, and prevalence. We included population-based studies in adults and mixed adults/adolescents that estimated CM prevalence (or provided information to calculate estimates). We defined chronicity as a minimum headache frequency of 10 per month or reported "daily" headache. Where equivalent, we combined diagnostic criteria and definitions. Findings were qualitatively summarized. **RESULTS:** Sixteen publications representing 12 unique studies were identified.